Digitized by the Internet Archive
in 2010 with funding from
Montana State Library

http://www.archive.org/details/montanaoutdoors151966mont

VOLUME 1 — NO. 5 MONTANA FISH AND GAME DEPARTMENT MAY, 1966

Frank Dunkle—Director of the Montana Fish and Game Department.

Director's Column

May 22 opened the general fishing season in Montana. Past experience told most of us that this would be a poor day for the weather and, of course, anyone who expected rain, snow and wind was not disappointed. But, the weather is clearing and fishing will be getting back to normal now.

An important part of fisheries management is knowing about the kind, number, and size of fish people are catching, as well as how long and where they fished. This is accomplished in several ways. A good share of this information is collected by personal contact; when a warden checks your license he generally asks you about your creel. He is interested in knowing how many fish you caught, of course, where you caught them, how long you fished, and size of the fish.

Another way to gauge the number of fish taken is through the fishing questionnaire. As the season comes to an end and these questionnaires are mailed, you can be of tremendous help to us by filling out the forms and returning them to us.

A third and most important way the public can help the department obtain valuable information is by keeping a fisherman's log. Every year a number of people keep track of their fishing trips and return these booklets to us. If you are an avid fisherman and interested in contributing to the knowledge of the fisheries resource in Montana, you can record your trips in one of these logs, which are pocket-size and easy to use.

Getting into the program is the easy part—staying with it is the important part. If you are interested in keeping track of your fishing jaunts this year, just drop us a note and request a fisherman's log. These booklets are requested by the department once a year. We take the information from them and return them to you—they are your property.

Aside from helping us you can build up a good record of your fishing trips over the years.

Contact us if you are interested in helping in this program.

Frank H. Dunkle

Big Fish

Fishermen, like most other American people, love to reminisce and dream about the "good old days." At that time fish were bigger, taxes

E. H. (Peck) Bacon of Three Forks with his record-breaking 29 pound brown trout.

were lower and just about everything else was better than at the present time. I suppose Mr. John Ferrell felt the same way when the following article appeared in the Bozeman Daily Chronicle.

"John Ferrell, better known as 'Popcorn John', has won a loving cup given by 'The Sportsman' for the largest native trout caught in Gallatin Valley waters. His fish was caught in the West Gallatin and weighed three pounds and six ounces when dressed."

This may sound like a recent news release but actually it carries a dateline of October 10, 1915. That 3½ pound trout would have been hard pressed to win a fishing contest in the Bozeman area in recent years.

Lists of large trout from rivers of Montana are very sketchy but here are a few that were taken since 1964. A 14-pound brown trout was taken from the Jefferson River in 1964. An 11 pounder was taken from the West Gallatin that same year. During 1965 a tackle dealer on the Lower Big Hole collected scale samples in conjunction with a big fish contest. He submitted scales from about 50 fish ranging from 3.0 pounds to over eight pounds. Each year Dan Bailey adds several plaques to the "Wall of Fame" at his tackle shop in Livingston. A fish must be four pounds or over and must be taken with fly fishing tackle to qualify for this distinction. During 1965, twenty trout ranging from four to seven pounds were added to the "Wall". Most of the fish entered are from the Yellowstone, but the competition is not limited to that stream. Dan Bailey, who is one of Montana's top fly fishermen, also indicated that he catches more large trout (3-6 pounds) each year now from rivers in Montana than he did 10 or 20 years ago.

In addition to the fish that qualify for the fly fishing competition, several trout over four pounds are taken from the Yellowstone River each year by lure and bait fishermen. A Dillon angler took a 14-pound brown near Gardiner in April, 1966 and two others weighing nine and seven pounds were reported earlier in the winter. Mr. E. H. Bacon of Three Forks probably tops all records with a 29-pound brown trout taken from Wade Lake on April 13, 1966. A Bozeman angler took a 13½ pound brown from this lake on April 23, 1966.

Department personnel have taken several fish in the 10 pound class with electric shockers. In 1963 a pair of 10 pound browns were captured and released in the Ruby River. That fall a 12 pounder was taken in the Shields River. A 15 pound brown was captured three times during the winter of 1964-65 in the East Gallatin River. He could not be found last summer so he must have moved out during high water or perhaps he died of old age. In February, 1966 a brown trout weighing 9¼ pounds was taken, released and recaptured from the East Gallatin in a heavily fished section near the Riverside Country Club north of Bozeman. Fish, especially brown trout, in the 2-5 pound class are common in the shocker samples.

Anglers and fishery managers recognize that the productive potential of many of our streams has been reduced by channel alteration, pollution, siltation, streambank disturbance and general deterioration of watersheds. These factors have reduced the numbers of trout that most streams can produce but the fish mentioned above indicate that there are still quite a few lunkers around. The trout may have been bigger in the "good old days" but the presence of good numbers of 2-5 pound trout and an occasional 10 pounder will continue to attract anglers to Montana's blue-ribbon trout streams.

The Stockpile

Long ago humans learned to anticipate their future needs and to plan ahead by saving or stockpiling certain items. Most of us try to save a few dollars each month for next year's vacation and the Christmas Club fund at the local bank has become a real status symbol. Likewise, most housewives buy extra groceries to store in the basement for use at some later time.

Therefore, it is not surprising that many fishermen hope to stockpile trout in our streams and to have many more available at some future time. Unfortunately, trout are regulated by factors other than our desire to save and therefore, they cannot be stockpiled like dollars or cans of corn.

A section of Odell Creek in the Madison drainage has been shocked twice a year for three years in order to obtain population information (see table). This stream has a reputation for providing good fishing. The study section is located near a main highway and is readily accessible to anglers.

The trout population of Odell Creek like those of most streams in southwestern Montana is predominately brown trout. Browns were most abundant in each sample and made up 85 percent of the trout handled during the study period. Fish up to four pounds were taken, but pan-sized trout made up most of the trout captured.

In spite of the fishing pressure exerted on this stream, the section showed a spring to fall increase in numbers of catchable-sized trout during all three years of the study. This increase occurred during the summer when most of the angling pressure was exerted on the stream. Normal population growth exceeded the angler harvest plus natural mortalities. In other words, the anglers had little or no effect on population changes in the study section.

The spring to fall change is largely influenced by recruitment of yearling brown trout into the fishery during the summer. The browns hatch out in early spring and are four to five inches long in August. These fish enter the fishery the following summer and they range from seven to 11 inches long during their second August. This size group was less abundant in the August, 1965 sample, which accounts for the smallest fall population of the study period. However, young of-the-year brown were twice as abundant in August, 1965 as in previous years, so the number of seven to 11 inch browns should be up again in 1966. Fluctuations of this magnitude are normal in a trout population and they will occur with or without an angler harvest.

A few hatchery rainbows were planted in this stream during 1963.

Number and Weight of Catchable-Sized Trout in a Section of Odell Creek

Date	Brown Trout No.	Brown Trout Wt.	Rainbow Trout No.	Rainbow Trout Wt.	Brook Trout No.	Brook Trout Wt.	Total No.	Total Wt.
5 10 63	48	37	12	6			60	43
8 12 63	75	41	18*	5			92	46
5 4 64	43	28	12	6			55	34
8 28 64	96	44	1	1			97	45
5 18 65	56	40	9	4	1	—	66	44
8 31 65	65	33	2	1			67	34

*Includes 5 hatchery fish.

Five of these fish were taken in the August, 1963 shocker sample but none were taken in 1964 or 1965. The number of wild rainbows remained nearly constant from May to August in 1963, so apparently the harvest of hatchery fish replaced the normal harvest of wild rainbows. By May of 1964 the rainbow population was back down to the same level as during the previous spring. During 1964, anglers harvested most of the catchable-sized rainbows. However, by May 1965 the number of catchable-sized rainbows was back up, due to recruitment from young-of-the-year fish. Again during 1965 anglers harvested most of the rainbows but the number of young rainbows present in August, 1965 indicates a good crop of pan-sized rainbows for 1966.

Each year some fish are marked for an efficiency check on the shocking equipment. In August 1965, nearly 60% of the catchable-sized fish taken had been previously marked. This indicates that most of these fish grow up and live out their lives in a relatively small section of stream. The effects of movement into or out of a study section of this kind are minimal.

Trout populations are an annually renewable crop from which an annual harvest can be taken. If that harvest is not taken the crop is lost and will not be available the next year. This study shows that anglers did not harvest the annual growth in the population; nevertheless, spring populations were reduced to a comparable level in all three years.

So let's continue to plan ahead by putting a few dollars in the bank and keeping the family cupboard well stocked. Let us also utilize the annual crop of trout from our streams, because unlike money and groceries, they cannot be stockpiled for future years.

Animalnaping— A Spring Problem

There's something about new born animals that makes people want to pick them up and take them home. Each summer the problem of "animal naping" pops up again. People pick up young cuddly deer and antelope or other creatures, take them home and nurse them to adulthood.

Then problems begin to develop. The once cuddly, shy animals are now hard-hooved, hard-headed and no longer shy. They chase the kids and eat up the gardens. The question now arises on how to dispose of the partially domesticated and bothersome pets.

In the first place, it's illegal to possess a live game animal, furbearer, or game bird excepting as provided by game farm permits. In the second place, it's probable that the animal hasn't prospered by the deed which is usually intended as a good Samaritan act. Young animals are habitually left alone for long periods until they're strong enough to travel with the parents. Persons find the youngsters hidden away and figure that they're lost. You can bet that in most cases the parent knows the whereabouts of its offspring and will return to it.

Persons are requested to please not pick up young game animals or birds.

Persons who pick up game animals such as this antelope fawn invariably find that their pets are a peck of trouble. It's illegal to possess live game animals, game birds, or furbearers without having a game farm permit.

How to Tell the Brook Trout from Other Game Fish

Fishermen may now legally take up to ten pounds of brook trout in addition to other limits of game fish. This places an added responsibility on fishermen. They will have to be able to identify brook trout in order to enjoy the special limit.

The brook trout is a very beautiful game fish and can be easily distinguished from all other fish in Montana with one exception. The exception is the Dolly Varden or bull trout which is found west of the Continental Divide.

The distinguishing characteristic of the brook trout is the color of the lower fins. The leading edges of the

Brook trout. Note the identifying characteristics: wavy lines, vermiculations on the back; pigmented adipose fine (stubby fin on the back just forward of the tail; white leading edges on the lower fins.

lower fins are white with a black strip immediately behind the white edge. Red spots surrounded by bluish rings are sprinkled over their sides. The backs of brook trout are marked with dark, wavy lines often referred to as vermiculations or worm tracks. Spawning males may have orange on the belly and black on the lower sides.

Lower fins of Dolly Varden (bull trout) look much like those of the brook trout. They have pale outer edges with darker stripes adjoining them. They tend to have bright orange or red spots on their sides. In lakes the spotting is often yellow and only appears on the backs of the fish. One can distinguish brook trout from Dolly Varden by looking at the backs of the fish. Whereas, the backs of Dolly Varden are spotted, the backs of brook trout are not spotted but show the characteristic vermiculations described above. The small stubby fin on the backs, just forward of the tail, is pigmented on the brook trout but is not pigmented on the Dolly Varden.

Rainbow and brown trout are the other trout most commonly caught. Color of rainbow trout will vary greatly, depending upon their ages, water depths in which they live, temperatures of water and general genetic line. Generally, they are a base bluish or olive color on the upper parts. This shades into a silvery or silvery green on the sides. The dorsal fin (big fin on the back), tail and sides are sprinkled with small dark spots. A characteristic broad band of pink or red runs along the sides from head to tail. Rainbow will often cross with cutthroat trout and the crosses may have characteristics of both fish, including a colored band down the sides and a pink or red slash on either side of the lower jaw.

The color of brown trout also varies widely. In general, its color on top and on the upper sides is a dark brown to olive brown. The lower sides become lighter, sometimes almost yellowish. Their backs are heavily marked with black or brown and red spots. The red spots on the sides are often surrounded with light rings.

Yellowstone Float Trip

Old Cap'n Grant Marsh, dauntless figure of the riverboat days, was probably never confronted with such a bunch of river pirates as will be afloat on the Yellowstone July 8, 9 and 10. You can bet that there'll be many a plank walked and there's likely to be a flagon or two of rum at the end of the journey.

Seriously, there will be a large number of persons taking part in the third annual Yellowstone Float Trip. Last year almost 130 craft took part in the float, and indications are that this year's will also be a big success.

Mr. Willard E. Fraser, mayor of Billings, has written—"The Yellowstone River still roars and meanders —as the humor seizes it—out of the lake that bears its name, high in Yellowstone Park (where water is made), down the Yellowstone Valley, past sites of great beauty, all closely tied to historic western America that is still as unchanged as when Captain Clark of Lewis and Clark fame first saw it. It is on the banks of this river that Captain Clark was grounded and put afloat by the Crow Indians—who believing that it is always a native's right to 'take the tourist'—relieved him of his twenty-six horses while he, tourist-like, was viewing and awing the great beauties of our Yellowstone Valley. (Recently, when Clark's great-great-grandson came through Billings, a number of Crow Indians met him at the train and handing him a rope to which several horses were tied, said, "We're sorry we stole Captain Clark's horses. Now we bring them back. Here they are.')

Pompey's Pillar, the monumental rock on which Captain Clark carved his name, still towers—with his name intact—high above the river, and this, along with many other significant sights of historic lore, banks

Floating Montana's rivers was once a serious business and an important means of transportation. Even though our ancestors sometimes feared for their scalps, floating was done just for pleasure too. Historical Library Photo.

Schedule of Events

July 7—Livingston—Boat Float Headquarters set up—Free Coffee and Information.

July 8—7 A.M.—Breakfast at Boat Launching Area.

9 A.M.—Launch Boats for Springdale.

About Noon—Lunch at Springdale.

Late Afternoon—Arrive at Big Timber.

5-7 P.M.—Supper served at Landing Area.

Evening Festivities.

July 9—7 A.M.—Breakfast at Boat Launching Area.

9 A.M.—Launch Boats for Reed Point.

About Noon—Lunch at Reed Point.

Late Afternoon—Arrive in Columbus.

5-7 P.M.—Supper served at Boat Landing.

Evening Festivities.

July 10—7 A.M.—Breakfast at Boat Launching Area.

9 A.M.—Launch Boats for Laurel.

About Noon—Lunch at Laurel

Late Afternoon—Arrive at Billings and the end of the trip.

Persons who are interested may get additional information from the 1966 Float Trip chairman—Mr. Don Henke of Big Timber, Montana.

---

our Yellowstone, still belonging to those possessing the red-blooded curiosity of Lewis and Clark, for all who would come again to see and explore. This rock will be dedicated this summer as a National Historic Site . . . This river is, again, a white-water river, but one that is not unduly or unnecessarily dangerous. There are boats manned by grandparents and one last year by grandmothers who have no intention of retiring to the porch with an apron full of socks to darn their way into eternity. There are kayaks, canoes, and others ranging from bull boats to battleships, with some teen-agers going by inner-tube. This is an exciting, fun trip and one that I feel will be of interest to you, and your readers. Further information will be supplied upon demand, but know for a fact that you and all who love outdoor America at its best are invited."

Summer Fishing Access Program For 1966

The Fish and Game Department's work program for the summer of 1966 has been set up to allow work on several fishing access areas. This work consists of installing latrines, wooden picnic tables, fireplaces, garbage disposal facilities, fencing where necessary, cattleguards, construction of boat launching ramps where required and in some cases, development of water facilities.

The work is well distributed throughout the state with three jobs scheduled for District 1, three for District 2, nine for District 3, two for District 4, four for District 5, one for District 6 and three for District 7.

Site planning is an important part of the development program. This work has not yet been fully accomplished on the proposed sites, so the job descriptions are tentative and subject to modification.

Areas Slated For Development

Blanchard Lake—A 2.51 acre site on Blanchard Lake, approximately five miles west of Whitefish, Montana. This site will require right-of-way acquisition, 2 latrines, 4 picnic tables, 4 fireplaces, 1 boat ramp, 4 garbage cans and possibly some road work. Total cost will be approximately $6,000.00.

Sportsman's Bridge—An area of 5.17 acres located 16 miles southeast of Kalispell on the Flathead River a few miles upstream from its confluence with Flathead Lake. Two latrines and a boat-launching ramp already exist on the site. It is planned to install 4 tables, 4 fireplaces and 4 garbage cans on the area. Approximate expenditure will be $470.00.

Ashley Lake—A site containing 31.56 acres, located on Ashley Lake approximately 20 miles west of Kalispell. There has been some development in the past consisting of 2 latrines, signs and some spring water development. It is planned to install 6 tables, 6 fireplaces, 6 garbage cans and do some road work. Approximate cost of development will be $1,750.00.

District 2

Clearwater Crossing—A small 15 acre tract within the boundaries of the Blackfoot Clearwater Game Range where the highway bridge crosses the Clearwater River near the junction of Montana 20 and 209. Development work planned will consist of installing 4 latrines, 12 tables, 12 fireplaces, 12 garbage units, some road work and 2 wells. Estimated cost on this site is $6,400.00.

Murphy Tracts—These are recently purchased tracts on Monture Creek and the north fork of the Blackfoot River. It is planned to develop 2 of the tracts having a total of about 15 acres. These sites are located approximately 8 miles west of Ovando. The following work is planned—installation of 4 latrines, 8 tables, 8 fireplaces, 8 garbage units, approximately 1 mile road construction, some fencing and installation of 2 cattleguards. Estimated cost of the above $8,360.00.

Ninemile Prairie—A site containing 9.6 acres located on the Blackfoot River near the mouth of Belmont

Creek. It is planned to install the following units: 2 latrines, 4 tables, 4 fireplaces, 4 garbage units, some road work and fence construction and 1 water well. Total estimated cost of this project is $4,000.00.

District 3

Harrison Lake—A 39.95 site located 8 miles east of Harrison, Montana on a Water Board reservoir. Some road work has been done as well as installation of a cattleguard. Some other development work has been done by others than the Fish and Game. It is planned to replace some structures that are in bad shape and to augment those that are already existing. This site will require 4 latrines, 10 tables, 10 fireplaces, 10 garbage units, 1 boat ramp, some interior road work and 2 water wells. Estimated cost for this work is $6,950.00.

Mallards' Rest—A 16.98 acre tract located on the Yellowstone River above Livingston. It is planned to install 2 latrines, 6 tables, 6 fireplaces, 6 garbage units, some road work and 1 water well. Estimated cost of construction is $2,850.00.

Emigrant—A small 2.32 acre site located ½ mile east of Emigrant. The following units are planned, 2 latrines, 4 tables, 4 fireplaces, 4 garbage units, some road work. Total cost is estimated at $2,260.00.

Paradise—A small site of 2.66 acres located approximately 18 miles south of Livingston. The following units are planned, 2 latrines, 4 tables, 4 fireplaces, 4 garbage units, some road work and installation of 1 cattleguard. Estimated cost of the above is $4,350.00.

Cameron Bridge—A 55 acre site located 2 miles south and 2 miles east of Belgrade, Montana. It is planned to install the following units, 2 latrines, 4 tables, 4 fireplaces, 4 garbage units, some road work and installation of 1 cattleguard. Estimated cost of this work is $3,440.00.

Fairweather—A 48 acre site on the Missouri River near the old townsite of Clarkston. It is planned to erect approximately 0.5 miles of fence at a total cost of $650.00.

Ennis—A 70.0 acre tract across the river from Ennis, Montana. The area has considerable development at the present time. It is planned this summer to improve the entrance road at an approximate cost of $500.00.

Valley Garden—A 147 acre site located approximately 5 miles from Ennis, Montana. This area received some development last year. It is planned to spend on water development, approximately $500.00.

Four Corners—A small area on West Gallatin River about 2 miles east of Manhattan, Montana. Planned development includes 2 latrines, a cattleguard and some fencing. Approximate cost about $1,200.00.

District 4

Carters Ponds—Two tracts located approximately 6 miles north of Lewistown, Montana, containing 11.13 acres total. It is planned to install 4 latrines, 8 tables, 8 fireplaces, 8 garbage units, some road work, 1 water well and necessary fence and cattleguard construction. Approximate cost—$7,600.00.

District 5

Voges Bridge—A 45 acre site located about 8 miles west of Big Timber within 1 mile of Interstate 90. It is planned to install 4 latrines, 10 tables, 10 fireplaces, 10 garbage units, 1 boat launching ramp, necessary fencing, cattleguards and the construction of 1 well. The estimated cost of this work will be $7,870.00.

Columbus—A 26 acre site located on the Yellowstone River on the out-

Operation Golden Eagle

A number of articles have appeared in this bulletin describing the Federal Recreation Area Entrance Permit and how the funds gained through sale of the permits are being used for acquiring and developing outdoor recreation facilities.

If you plan to travel national parks or visit other federal recreation facilities, you may find purchase of the $7.00 permit more economical than paying piecemeal to enter the various recreation areas. A coupon is provided here for your use in procuring a permit in the event none are offered for sale in your area.

FOR MORE RECREATION LANDS AND WATERS

OPERATION GOLDEN EAGLE NEEDS YOUR SUPPORT

$7 MAKES YOURS A GOLDEN EAGLE FAMILY

. . . buys a 1-year **Golden Passport** for you and your family to 7,000 Federal Outdoor Recreation Areas plus a handsome **Award Certificate,** suitable for framing. Every penny of your $7 is used for more State, county, local and Federal Recreation Lands and Waters. Mail coupon today.

OPERATION GOLDEN EAGLE
Bureau of Outdoor Recreation
Dept. B Box 7763
Washington, D. C. 20044

Send me **Golden Passport** and Award Certificate. Enclosed check ☐ money order ☐ for $7, payable to Bureau of Outdoor Recreation.

NAME (Please print)

ADDRESS

CITY & STATE ZIP

OR-T

skirts of Columbus. This site is adjacent to the proposed City Recreation Complex. Coordination with the city program is vital. At this time, it is planned to install the following facilities, 4 latrines, 10 tables, 10 fireplaces, 1 boat launching ramp, 10 garbage units, some road work, water installation and fencing as necessary. Estimated cost of this work is $6,450.00.

Selkirk—A 600 acre site located approximately 6 miles west of Twodot on the Musselshell River. At present no survey has been done, but it is planned to separate the recreation land from the hay ground and install the following components, 4 latrines, 8 tables, 8 fireplaces, 8 garbage units, necessary road work, 1 water well and some fencing. Estimated expenditures for this area are $7,520.00.

District 6

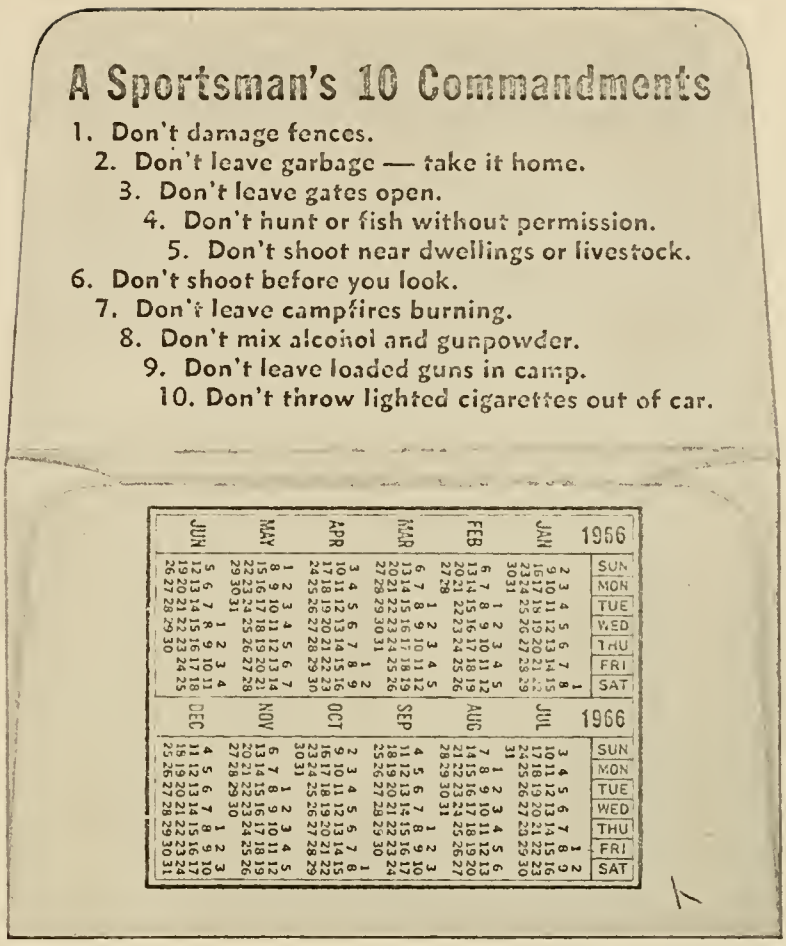
Bear Paw Reservoir—An 80 acre tract located approximately 12 miles south of Havre in the Bear Paw Mountains. Much development has already been done on this area. It is proposed this summer to erect traffic barriers to channelize the traffic on the area to prevent destruction of ground cover. It is also planned to drill 2 water wells. Estimated cost of this work is $4,000.00.

District 7

Rustad Reservoir—A leased area of 30 acres located approximately 20 miles north of Baker. It is planned to install 2 latrines, 4 tables, 4 fireplaces, 4 garbage units, some road work and a cattleguard. Estimated cost is $4,000.00.

Rush Hall Reservoir—A 24 acre site on easement to the Fish and Game. It is planned to construct approximately 2 miles of road. Estimated cost is $2,900.00.

Tongue River—A leased area of 44 acres located 12 miles south of Miles City. The following improvements are planned: 1 latrine with necessary fencing. Estimated cost is $500.00.


A Sportsman's 10 Commandments
1. Don't damage fences.
2. Don't leave garbage — take it home.
3. Don't leave gates open.
4. Don't hunt or fish without permission.
5. Don't shoot near dwellings or livestock.
6. Don't shoot before you look.
7. Don't leave campfires burning.
8. Don't mix alcohol and gunpowder.
9. Don't leave loaded guns in camp.
10. Don't throw lighted cigarettes out of car.
1966
JAN FEB MAR APR MAY JUN
1966
JUL AUG SEP OCT NOV DEC
SUN MON TUE WED THU FRI SAT

Envelope provided to local license agents by the Skyline Sportsmen's Association of Butte.

Sportsmen's Project

The Skyline Sportsmen's Association of Butte, Montana has provided hunting and fishing license agents in their area with shirt pocket or billfold-size cardboard envelopes. The envelopes are a handy license holder and are being given to license buyers. Included on the envelope is a 1966 calendar and "A Sportsman's 10 Commandments". Persons who take seriously the ten commandments will not only be safe hunters, but they'll also be envoys of good landowner-recreationist relationships.

Why We Need to Study Elk Migrations and Movements In the Gallatin

A study on the movements and migration of elk in the Upper Gallatin canyon was begun last winter. Three hundred and ten elk were given brightly-colored neckbands and were ear tagged at Daly Creek. This study will be similar to one which has already been completed in the Sun River and to projects that are underway in Colorado and New Mexico. It calls for a large number of animals to be neckbanded and the use of a helicopter for spotting large numbers of the banded sample in a short period of time.

The department is studying the elk movements and migration patterns in the Upper Gallatin in order to determine if the elk population can be considered as a discreet unit which intermingles across its entire range, or if it is comprised of separate units. Do elk summering in the Bacon Rind-Migration Creek area winter in the Taylor Fork? Is there a group of elk which moves only onto the Daly-Teepee area and no further north? Are the elk being harvested in the Taylor Fork-Upper Madison part of the population which comes through Daly-Teepee Creek? From which area do the elk that move across to the Madison ranges come?

Harvest information from the 1964-65 late elk season in the Gallatin suggests that there was a difference in sex ratios and cow-calf ratios among elk wintering in the Teepee-Lodgepole area from those wintering in the Taylor Fork and Porcupine Creek. This would suggest that the Upper Gallatin elk do not comprise a discreet herd, but rather a group of populations. Other information points to this also.

The department can now direct hunter harvest during these late seasons when the elk are available to hunters. This capability affords harvesting from individual areas in greater or lesser proportion than other areas in the Upper Gallatin. The banding project will provide information on movement patterns of individual elk. Coupled with information on range utilization, the knowledge can, in turn, be used to direct hunter harvest in various areas. Chances are that even though there is an annual harvest which will keep the elk population to a thousand head, which the management plan calls for, the desired range recovery will not be realized unless selected harvest of the population by individual groups and by areas is achieved. At the same time, it is not desirous to diminish a specific group of elk from the Gallatin through intensive harvest. It is much more desirable to harvest from all groups, and thus control the entire population. Such differential hunter harvest problems have been observed in the Gravelly Range and the Little Belts, and now in the Sun River. This happens because on a given area one group of elk is almost certain to be more vulnerable to hunters than other groups. With proper information on the movement of elk, such problems can be detected and provided for in the management of the Upper Gallatin elk herd.

Brightly colored neckbands on elk can fairly easily be spotted from the air. Helicopters make ideal spotting vehicles.

MONTANA
FISH AND GAME DEPARTMENT

HELENA, MONTANA 59601

Return Postage Guaranteed

3

Sec. 34.66, P. L. & R.
U. S. POSTAGE
PAID
Permit No. 50
Helena, Montana

MAY, 1966